CLAIMS

What is claimed is:

1   1. A hosting service providing platform comprising;

2   an automated computer cluster, said automated computer cluster including a

3   control center; and

4   a plurality of hardware-independent cluster nodes, whereby said control center

5   coordinates the functions of said plurality of hardware-independent cluster nodes.

1   2. The platform as defined in Claim 1, wherein said plurality of hardware-

2   independent cluster nodes further comprises a specialized distributed file system.

1   3. The platform as defined in Claim 2, wherein said specialized distributed file

2   system is integrated and optimized for said automated computer cluster.

1   4. The platform as defined in Claim 2, wherein said specialized distributed file

2   system further comprises data for a plurality of virtual environments.

1   5. The platform as defined in Claim 4, wherein each of said plurality of virtual

2   environments further comprises:

3   software providing emulation of a full service computer with its own operating

4   system;

5   a unique administrative root user for each member of said plurality of virtual

6   environments;

7   a file system template and file tree; and

8   operating system parameter configuration;

9   and further wherein each of said plurality of virtual environments does not include

10   dedicated physical memory or any other hardware resources.

1   6. The platform as defined in Claim 4, wherein said specialized distributed file

2   system further comprises:

3   means for making file transactions from any file system changes made in at least

4   one of said plurality of virtual environments;

5   means for distributing said transactions to achieve the appropriate level of data

6   accessibility; and

7   means for permitting access to data from each member of said plurality of cluster

8   nodes.

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1   7. A method for providing a hosting service providing platform comprising the

2   steps of:

3   automating a computer cluster, further including

4   establishing a control center; and

5   operating a plurality of hardware-independent cluster nodes, whereby said control

6   center coordinates the functions of said plurality of hardware-independent cluster nodes.

1   8. The method as defined in Claim 7, wherein the step of operating said plurality

2   of hardware-independent cluster nodes further includes the step of implementing a

3   specialized distributed file system, further wherein said specialized distributed file system

4   is integrated and optimized for each member of said plurality of hardware-independent

5   cluster nodes.

1   9. The method of Claim 8, wherein the step of operating a plurality of hardware-

2   independent cluster nodes further includes the step of operating a plurality of virtual

3   environments.

1   10. The method of Claim 9, wherein the step of operating said plurality of virtual

2   environments further includes the steps of:

3   installing software which emulates a full-service computer with its own operating

4   system;

5   establishing a unique administrative root user for each member of said plurality of

6   virtual environments;

7   establishing a file system template and file tree for each member of said plurality

8   of virtual environments;

9   implementing the operating system parameter configuration for each member of

10   said plurality of virtual environments;

11   and further wherein said step of operating said plurality of virtual environments does not

12   include the step of dedicating physical memory or any other hardware resources.

1   11. The method as defined in Claim 10, wherein the step of operating said

2   plurality of virtual environments further includes the steps of:

3   making file transactions from any changes to said file system made in at least one

4   of said plurality of virtual environments;

5   distributing said file transactions to achieve the appropriate level of data

6   accessibility; and

7   permitting access to data from each member of said plurality of cluster nodes.

1   12. The method as defined in Claim 10, wherein the step of operating each

2 member of said plurality of hardware-independent cluster nodes further includes the steps

3 of:

4   installing a base operating system and network connection;

5   providing access to the distributed file system containing the file system template

6 for each virtual environment within said cluster node;

7   accessing the resources of said cluster node; and

8   utilizing said cluster node for launching new virtual environments.

1   13. The method as defined in Claim 11, wherein the step of permitting access to

2 data from each of the plurality of virtual environments at said plurality of hardware-

3 independent cluster nodes further includes the step of:

4   restarting each virtual environment in a failed cluster node at another cluster node

5 having appropriate resources available.

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1 14. A method for utilizing a hosting service providing platform in an operating

2 system comprising the steps of:

3   requesting a service in said operating system;

4   operating a virtual environment; and

5   utilizing a specialized distributed file system.

1 15. The method of Claim 14, wherein the step of operating said virtual

2 environment further includes the step of:

3   installing any application of said operating system.

1 16. The method of Claim 14, wherein the step of operating said virtual

2 environment further includes the step of:

3   configuring any application of said operating system.

1 17. The method of Claim 14, wherein the step of operating said virtual

2 environment further includes the step of:

3   launching any application of said operating system from said virtual environment.

1 18. The method of Claim 14, wherein the step of operating said virtual

2 environment further includes the step of:

3   repairing remotely any failed software configuration of said virtual environment.

1   19.   The method of Claim 14, wherein the step of utilizing a specialized

2   distributed file system further includes the step of:

3   achieving a corresponding fault tolerance level.